

Evaluation of the Directive 2006/66/EC

Initial results of the evaluation study

No 2: Recycling efficiency

Trinomics/Oeko-Institut/E&Y

Brussels, 14 March 2018

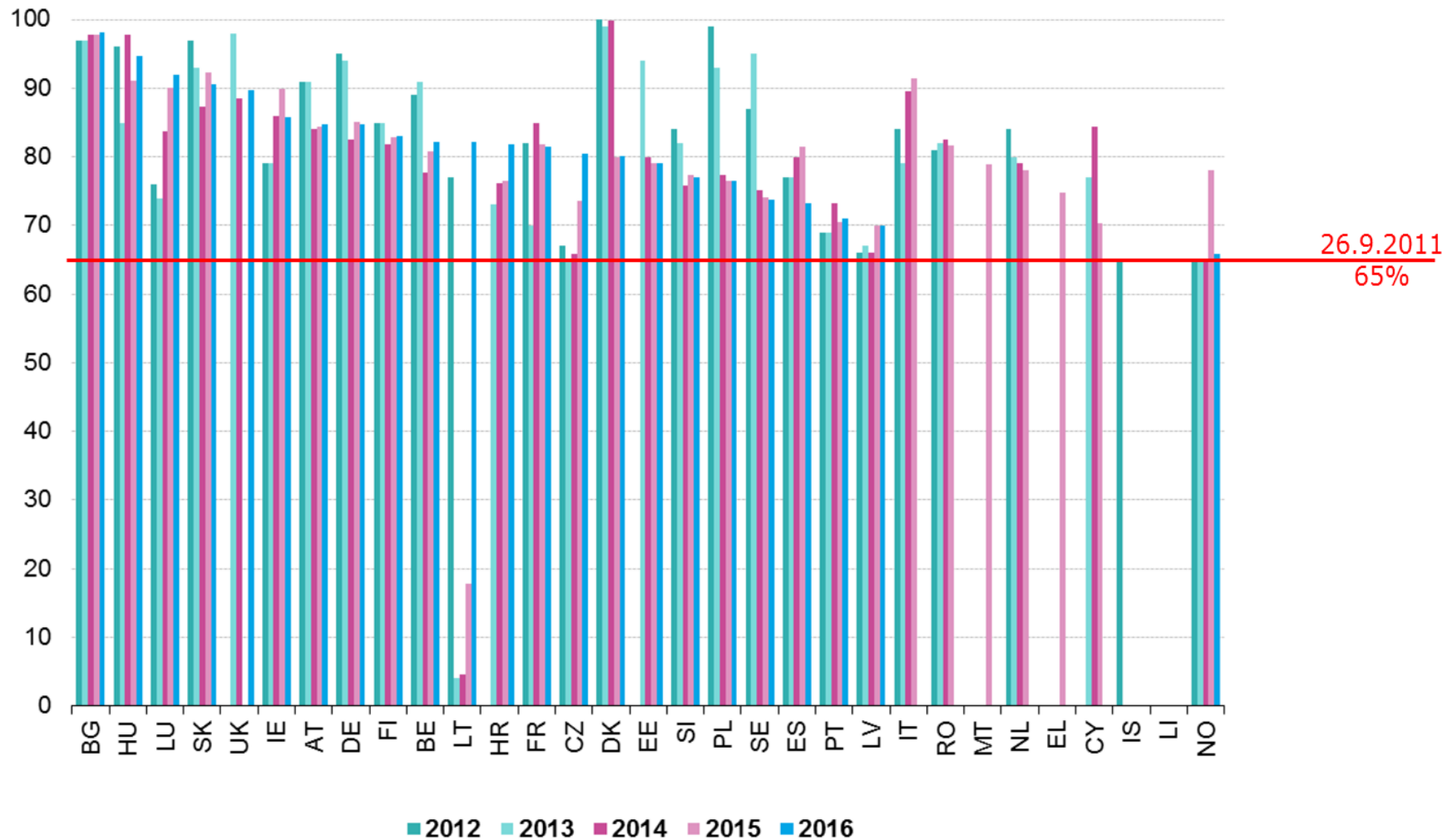


Agenda

1. Recycling efficiency targets
 - a. Pb-acid, NiCd, Other batteries recycling efficiencies, 2012 to 2016
 - b. Main results
2. Recycling efficiency: calculation methodology
3. Recycling abroad and methodology

1. Recycling efficiency targets

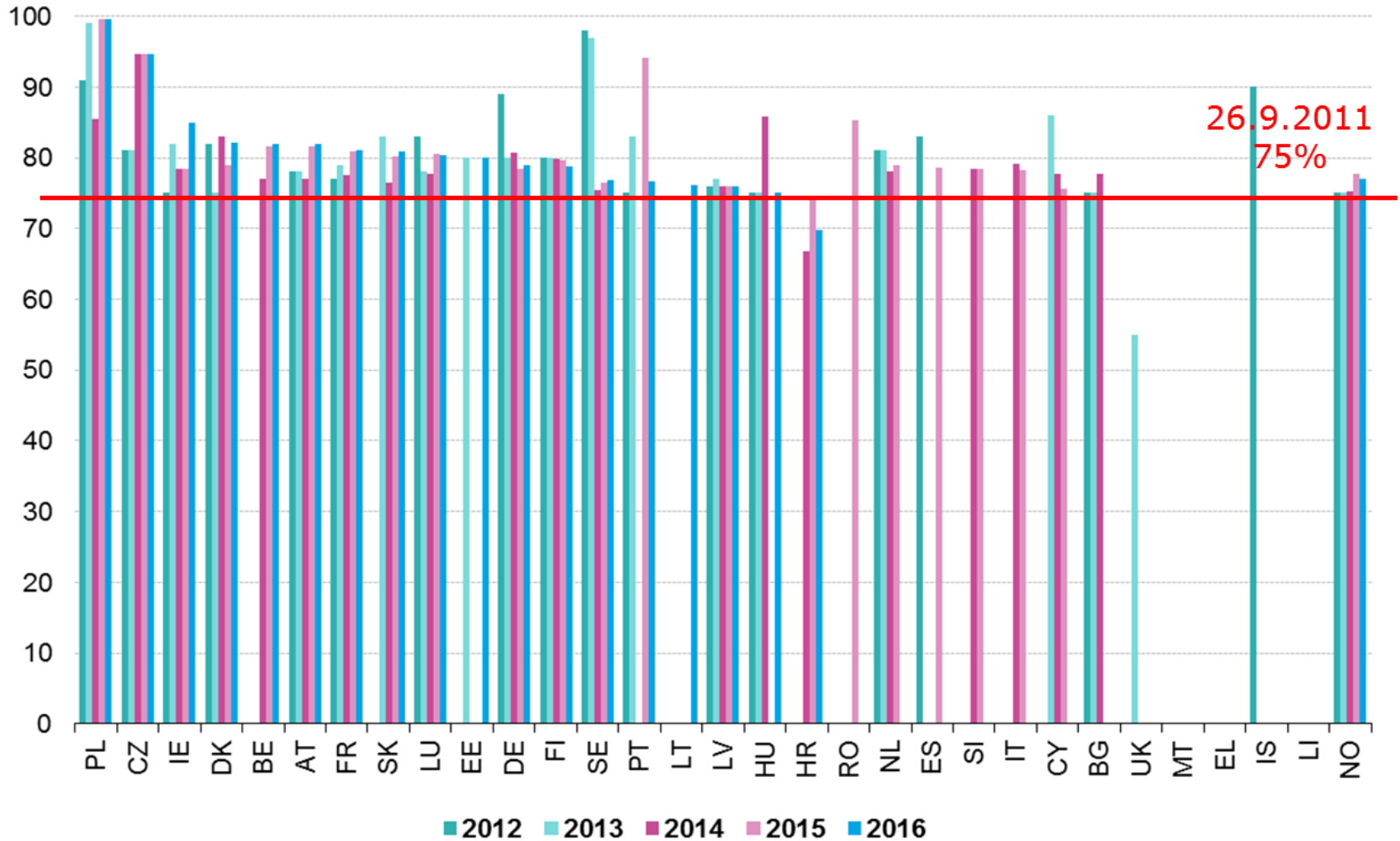
1.a Pb-acid recycling efficiencies (%), 2012 to 2016



Source Eurostat

1. Recycling efficiency targets

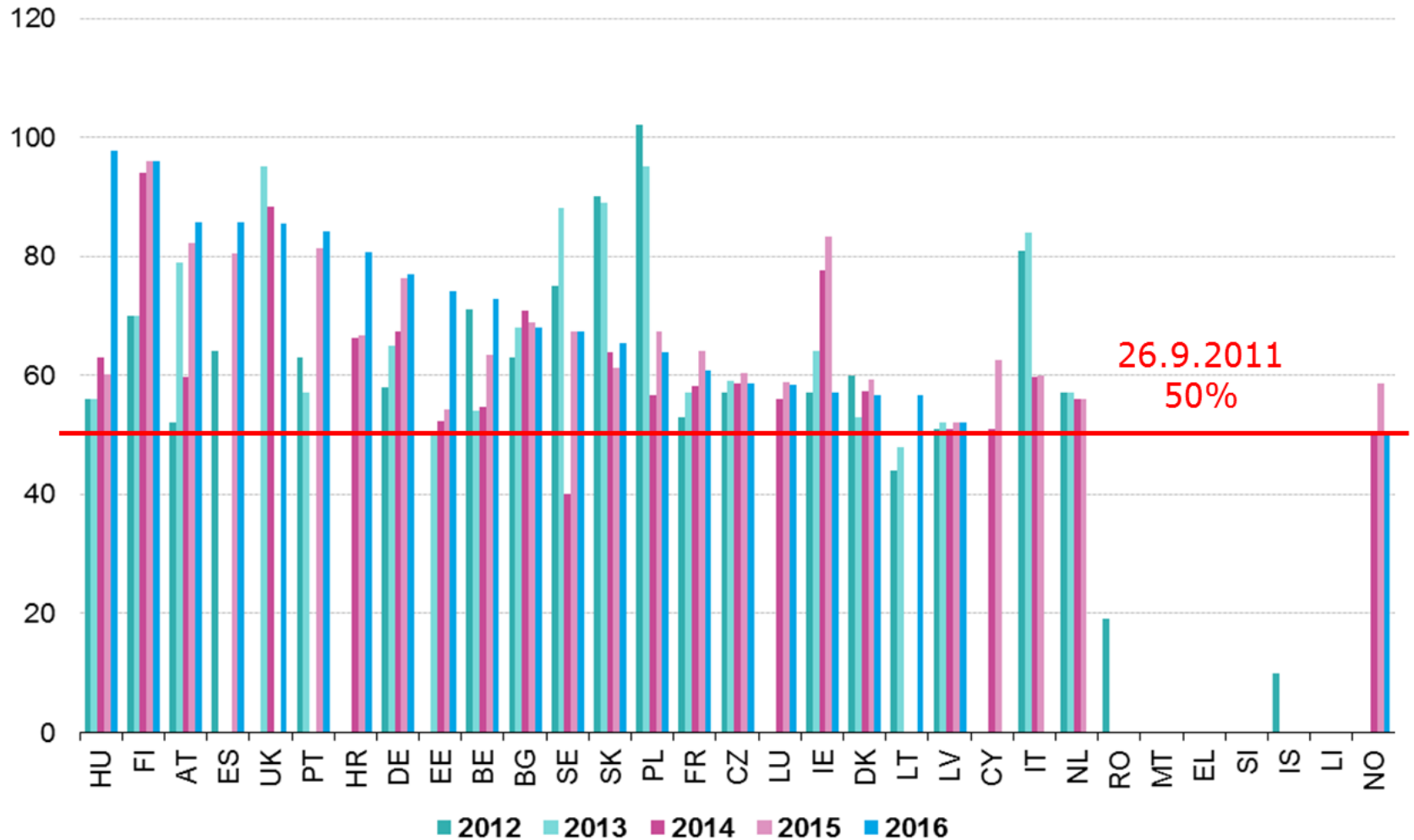
1.a NiCd recycling efficiencies (%), 2012 to 2016



Source Eurostat

1. Recycling efficiency targets

1.a Other batteries recycling efficiencies (%), 2012 to 2016



Source Eurostat

1. Recycling efficiency targets

1.b Main results

Generally, recycling efficiency targets were met by all countries which submitted data except HR:

- Lead acid batteries: 22 MS met the recycling efficiency target in 2016. 6 MS did not report data on recycling efficiency.
 - NiCd batteries: All reporting MS (18 MS) except HR met the recycling efficiency target in 2016. 9 MS did not report data on recycling efficiency (BG reported '0').
 - Other batteries: 21 MS met the recycling efficiency target in 2016. 7 MS did not report data on recycling efficiency.
- Recycling efficiencies for individual countries vary from 2012 to 2016 and no overall trend is visible.

2. Recycling efficiency: calculation method

Output fractions accounting for recycling – ‘slags’

- Another issue related to the recycling efficiency is the quality and subsequent use of an output fraction of the recycling process.
- What accounts for or not recycling is handled differently between MS.
- This is not harmonized between MS:
 - Batteries Directive, Article 3(8): “*‘recycling’ means the reprocessing in a production process of waste materials for their original purpose or for other purposes*”
 - Regulation (EU) No. 493/2012: “*battery and accumulator materials contained in slag suitable and used for recycling purposes as defined in Article 3(8) of Directive 2006/66/EC other than landfill construction or backfilling operations, provided that this is in line with national requirements.*”

Discussion



Points for Discussion

Output fractions accounting for recycling

Points for discussion

- Should the output 'slag' be counted as part of recycling when not all MS count slag?
 - Are there any other output fractions which are also dealt with differently?
 - Between Regulation 493/2012 and WFD, are there any differences in carbon as a reducing agent? How far is this relevant for recycling in practice?
- Does the Directive ensure a level playing field or not? How?

3. Recycling abroad and methodology

Amounts and relevance of batteries recycled abroad

Estimates based on Waste Shipment Regulation (no other comprehensive data sources available)

Inside the EU

- In 2015, about 0.3 million tonnes of waste batteries were exported inside the EU = about one fifth of the input fractions to recycling in EU28 (ca. 1.49 million tonnes waste batteries).
- The amount or percentage of batteries exported differs widely depending on the specific MS.

Outside the EU

- In the years 2012 to 2015, up to 3 158 tonnes of waste batteries per year were exported to countries outside the EU.
- This is less than 0.3% of the input fractions to the recycling in EU28.

3. Recycling abroad and methodology

Recycling efficiency: methodology is not the challenge; information from the recycling processes abroad is.

Stakeholder consultation revealed:

- Problems in receiving recycling efficiency data from recyclers abroad.
- Differentiation of the batteries' origin might be a problem in the data of some MS e.g. data on the input fractions to recycling (in tonnes) is based on total amounts treated by the recycler and not only on the imported amount of a specific country.
- Stakeholders stated that the 6-month reporting deadline is not sufficient and should be extended to 18 months, especially when recycling takes place in other countries.
- Recycling efficiencies (in %) of recyclers abroad are generally not related to the amount of actual exported waste batteries. The efficiencies apply for the entire plant. A differentiation of individual imported batches with different composition of waste batteries is not possible.

3. Recycling abroad and methodology

Recycling efficiency: methodological aspects related to recycling abroad.

- Generally, recycling efficiencies of a certain MS are based on the specific efficiency of recycling plants and represent the weighted average of all recycling plants involved.
 - In case of export to other countries, the MS' recycling efficiency depends on the plants in which the recycling takes place.
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Discussion



Points for Discussion

Recycling efficiency: methodological aspects related to recycling abroad.

Points for discussion: is it true that...

- Recycling efficiency is more a decision on where the batteries are sent for recycling and represents less the efficiency of the MS exporting the waste batteries.
- Recycling efficiency is not country-specific but plant-specific.

Recycling abroad shall take place under conditions equivalent to those set out in the Batteries Directive.

Points for discussion: is it true that...

- Missing certification (calculation methodology, data and resulting recycling efficiency would need to be certified) hampers the development of a level playing field.
- Missing certification is an issue for recycling inside (between MS) and outside the EU (MS / non-MS). Why?

Points for Discussion

Points for discussion

Taking into account the discrepancy between

- MS specific and plant specific recycling efficiencies,
 - the missing monitoring/certification of recycling abroad and
 - the problems with data availability from recyclers abroad,
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- should the approach chosen by the Directive and by the Regulation on the calculation of recycling efficiencies be considered appropriate?
 - should the provisions that make the calculation of efficiencies by Member States dependent on information from abroad be changed?

Thank you for your attention!

Any further questions?



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